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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/960,712	09/21/2001	Stan J. Simpson	08998-00693	4279

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EXAMINER

TRAN, THUY VAN

ART UNIT PAPER NUMBER

3652

DATE MAILED: 08/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/960,712

Applicant(s)

SIMPSON ET AL.

Examiner

Thuy v. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-31 and 33-43 is/are pending in the application.
- 4a) Of the above claim(s) 15,30 and 31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-29 and 33-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 16, 2005 has been entered.

Claim Objections

2. Claim 33 is objected to because of the following informalities: "greater or equal to than" in line 18 should be --greater than or equal to--, further, in line 21, --to-- should be inserted after "relative". Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 16, 19, 22, 23, 26-29, 34-37 and 41-43 are rejected under 35 U.S.C. 102(b) as being anticipated by Hastings, Jr. 3,083,853.

Hasting '853 discloses a mast for forklift truck comprising a carriage assembly 50, Fig. 2, having a first upper roller 64, a first lower roller 58, a second upper roller 64, and a second lower roller 58 and a front surface, and a first rail section, Fig. 5 including a first rail 18 and a second rail 18 positioned substantially parallel to each other, each rail 18 having a back inner surface (right hand portion in Figs 5-9) being substantially parallel to the front surface, a front inner surface (116) and a lateral inner surface (middle portion) adjacent to the front inner surface and the lateral inner surface is substantially normal to the front surface, wherein each of the front inner surface and the lateral inner surface of respective first and second rails is about 92°.

Re. claim 34, Fig. 5 shows a first rail comprises a first inner surface including a first back inner surface, a first front inner surface substantially opposite the first back inner surface, a first lateral inner surface that connects the first back inner surface and the first front inner surface; a second rail positioned

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substantially parallel to the first rail, where the second rail comprises a second inner surface including a second back inner surface, a second front inner surface substantially opposite the second back inner surface, and a second lateral inner surface that connects the second back inner surface and the second front inner surface; Figure 2 shows a carriage assembly comprising a first upper roller, a second upper roller positioned substantially opposite the first upper roller, a first lower roller, a second lower roller positioned substantially opposite the first lower roller, and a front surface; wherein the first upper roller and the first lower roller of the carriage assembly are operatively guided by the first inner surface of the first rail, and the second upper roller and the second lower roller of the carriage assembly are operatively guided by the second inner surface of the second rail, to cause the front surface of the carriage assembly to move along at least a portion of the length the first rail and the second rail; wherein the first lateral inner surface has a first front portion adjacent to first front inner surface and the second lateral inner surface has a second front portion adjacent to the second front inner surface, wherein the first front portion and the second front portion are substantially normal to the front surface; wherein the intersection of the first front inner surface and the first front portion forms a first angle (see Figures 5-9) between the first front inner surface and the first front portion; wherein the first angle is greater than or equal to 90.50.

Re claim 37, see Figure 5.

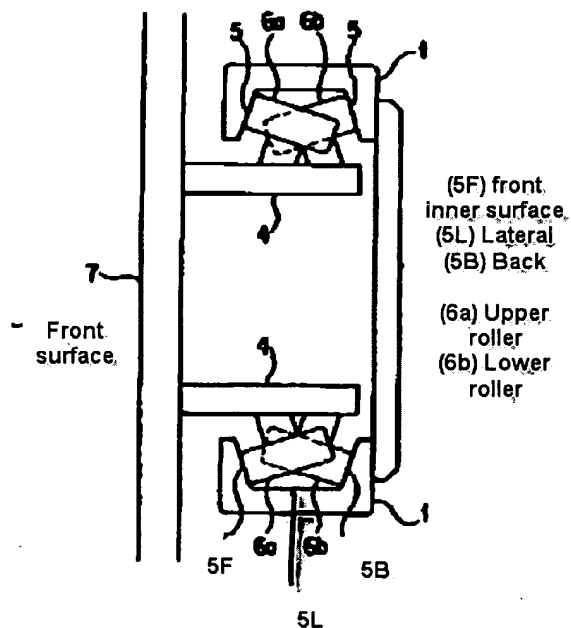
Re claims 41-43, the relative difference between the first angle and the second angle is about 1.0°.

5. Claims 34, 37, 38 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 5-70092 A (JP '092).

JP '092 discloses a mast for forklift truck comprising a first rail (Figure 6) comprises a first inner surface including a first back inner surface, a first front inner surface substantially opposite the first back inner surface, a first lateral inner surface that connects the first back inner surface and the first front inner surface; a second rail positioned substantially parallel to the first rail, where the second rail comprises a second inner surface including a second back inner surface, a second front inner surface substantially opposite the second back inner surface, and a second lateral inner surface that connects the second

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back inner surface and the second front inner surface; a carriage assembly comprising a first upper roller, a second upper roller positioned substantially opposite the first upper roller, a first lower roller, a second lower roller positioned substantially opposite the first lower roller, and a front surface; wherein the first upper roller and the first lower roller of the carriage assembly are operatively guided by the first inner surface of the first rail, and the second upper roller and the second lower roller of the carriage assembly are operatively guided by the second inner surface of the second rail, to cause the front surface of the carriage assembly to move along at least a portion of the length the first rail and the second rail; wherein the first lateral inner surface has a first front portion adjacent to first front inner surface and the second lateral inner surface has a second front portion adjacent to the second front inner surface, wherein the first front portion and the second front portion are substantially normal to the front surface; wherein the intersection of the first front inner surface and the first front portion forms a first angle (see Figures 5-9) between the first front inner surface and the first front portion; wherein the first angle is greater than or equal to 90.50.



Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Japan 5-70092 (JP '092) in view of Kelly Re. 30,815.

JP '092 discloses a mast for forklift comprising a carriage assembly having a first upper roller 6a, Figure 6, a first lower roller 6b, a second upper roller 6a, and a second lower roller 6b and a front surface, and an inner rail section comprising a first rail 1 and a second rail 1 positioned substantially parallel to each other, each rail 1 having a back inner surface, a front inner surface and a lateral inner surface (middle portion) that are capable of operatively guiding said carriage assembly along at least a portion of the length of the inner rail section, wherein the first upper roller and second upper roller on said carriage assembly are positioned relative to the front surface at an angle greater than or equal to 90.5°, wherein the front inner surface of the first guide rail and the second guide rail are positioned relative to the front surface at an angle of greater than 90.0°.

JP '092 does not disclose a multi-stage mast, namely a middle rail section and an outer rail section.

Kelly Re. 30,815 discloses a forklift truck comprising an inner rail section, a middle rail section and an outer rail section to provide stacking cargo to a considerable height such as in an open yard or warehouse.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a middle rail section and an outer rail section for the fork lift of JP '092 as disclosed in Kelly reference in order to provide a higher reach.

8. Claims 17, 18, 20, 21, 24, 25, 38-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hastings, Jr. 3,083,853 in view of Yarris 4,035,040.

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Hasting '853 discloses all the claimed limitations except for having a first and second upper rollers respectively having an angle relative to the front surface of about 92.5° to about 93.5°

Yarris 4,035,040 discloses a carriage having rollers mounted at angle of about 93° relative to the front surface to improve better self-alignably transmit forces rolling between the roller's shaft and a load bearing surface.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a self-aligning rollers having a shaft mounted at an angle of about 93° relative to the front surface in order to improve the rolling force between the rollers' shaft and a load bearing surface.

Response to Arguments

Applicant's arguments with respect to independent claims 16, 33, 34 and 41 have been considered but are moot in view of the new ground(s) of rejection.

Note, applicant's arguments regarding JP 5-70092 A with respect to claim 16 that the JP '092 lacks an back inner surface substantially parallel to the front surface of the carriage is moot since that rejection has been withdrawn. JP '092 is still readable on limitations of claims 34, 37 and 38.

In response to applicant's remarks that both Yarris '104 and '040 do not disclose or suggest an angled front inner surface, the rejections with respect to that limitation has been withdrawn in view of the amendment.

Examiner agrees with Applicant's argument that Kelly '815 does not disclose or suggest an angled front inner surface and a lateral inner surface that is substantially normal to the front surface of the carriage.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuy v. Tran whose telephone number is 571-272-6932. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen D. Lillis can be reached on 571-272-6607. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TVT (TVT)


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